



Figure

Coronary Artery Dissection. Follow-up by MDCT

Currently available multidetector computed tomography (MDCT) scanners sometimes allow assessment of coronary stents, particularly those larger than 3 mm in size implanted in the proximal segments of the coronary arteries. We present the case of an 81-year-old patient who was admitted to perform coronary angiography for progressive angina. During catheterization of the left coronary ostium, a dissection of the common trunk and left anterior descending artery occurred (Figure, A), which was complicated by cardiorespiratory arrest requiring intra-aortic balloon counterpulsation and mechanical ventilation. Two stents were implanted to completely cover the dissection, with restoration of TIMI 3 flow; 24 hours later ventilatory support was discontinued. The maximum CK/CK-MB peak was 1905/86 U/L. The patient remained asymptomatic, and following stabilization 2 days later, a follow-up 64-detector MDCT was carried out. The images showed patency of the stents (Figures, B and C), and additionally demonstrated progression of the dissection to the medial segment of the circumflex artery

and a feature consistent with a thrombus, probably located in the false lumen (Figure, D). Based on these findings, a new coronary angiography with possible surgical revascularization was planned, but 12 hours after the MDCT examination, the patient experienced an episode of chest pain with ST-segment elevation from V1 to V5, complicated by electromechanical dissociation, and culminating in death. A post-mortem study was not performed.

This case illustrates the usefulness of MDCT for follow-up of coronary stents located in proximal segments, and for identifying specific complications: extension of a dissection and even visualization of a coronary thrombus.

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